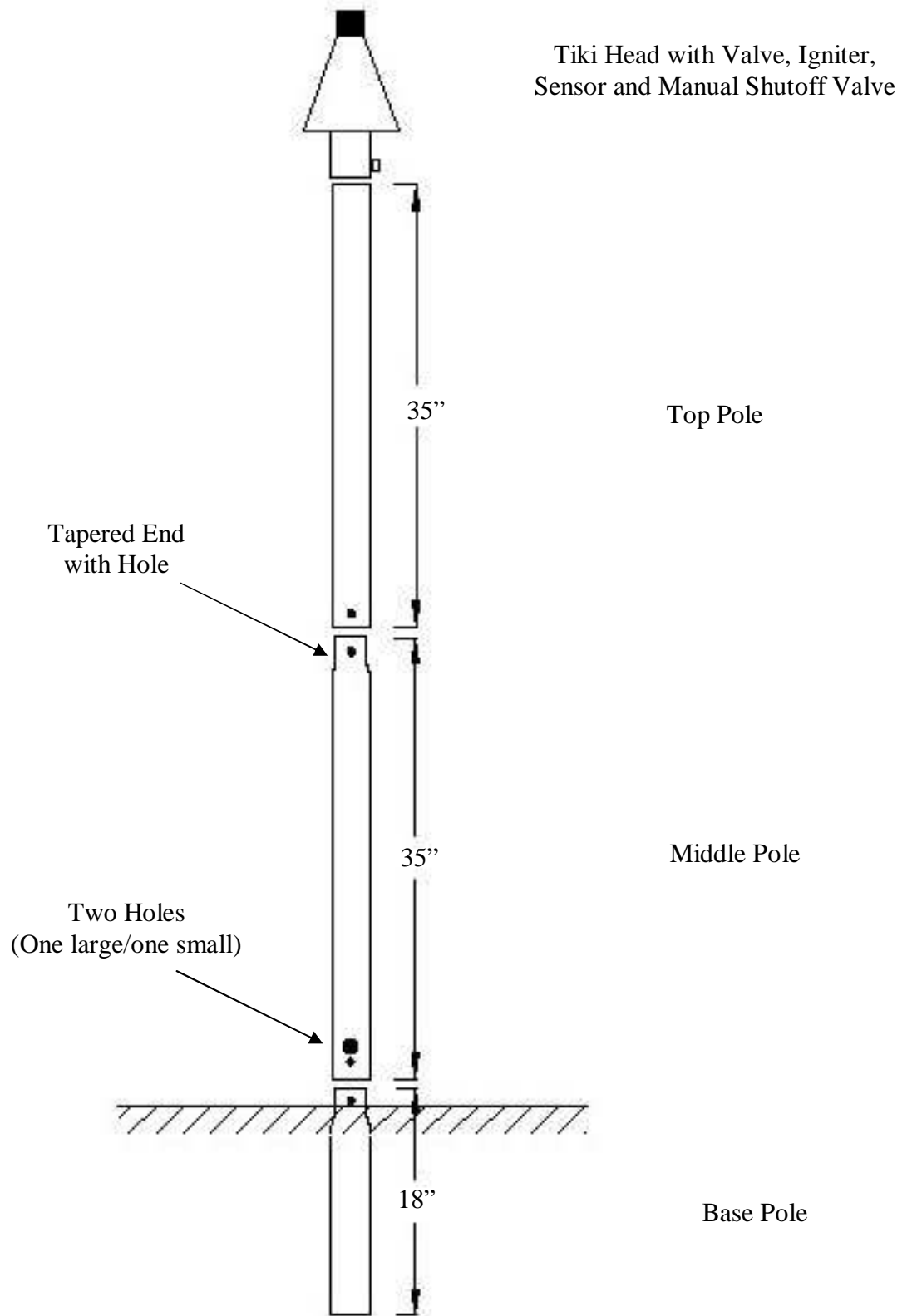


Automated Tiki Torch Installation Instructions

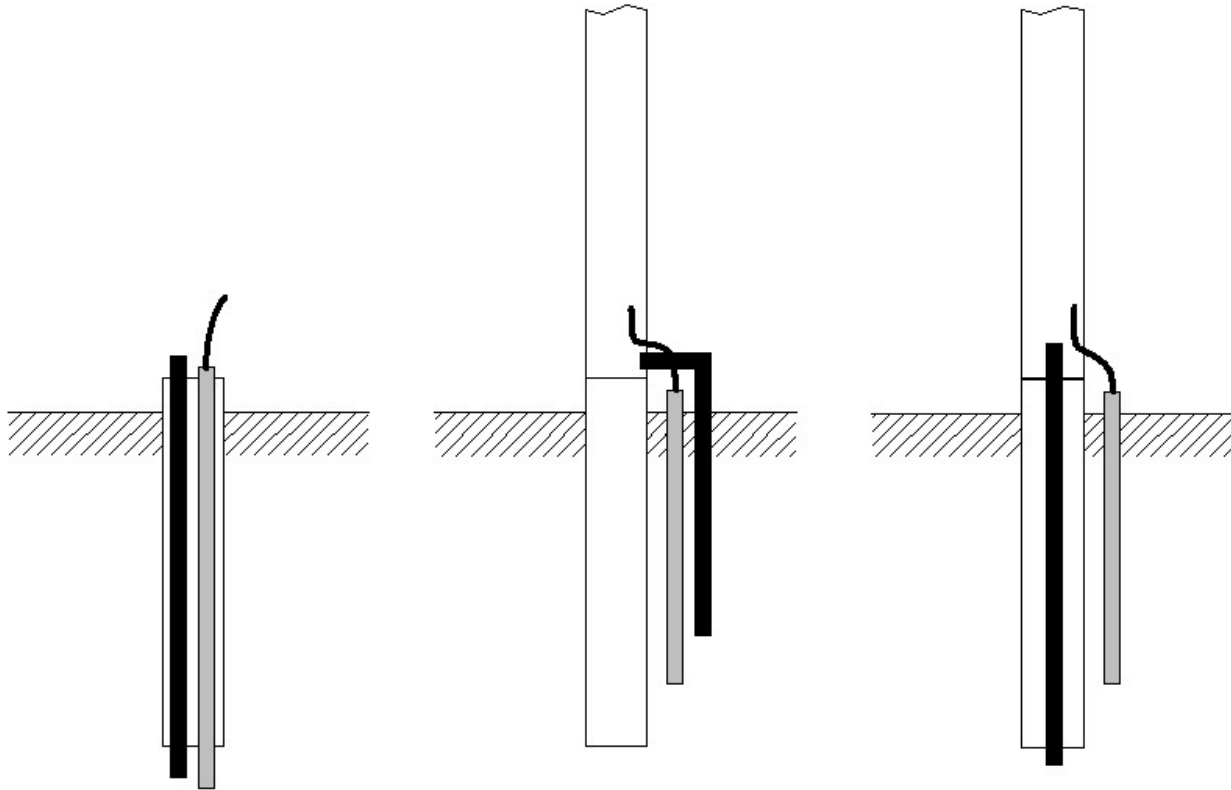


Written by Bob Roman

Automated Tiki Torch (Exploded View)



Rough In for Automated Tiki Torches Three Installation Options



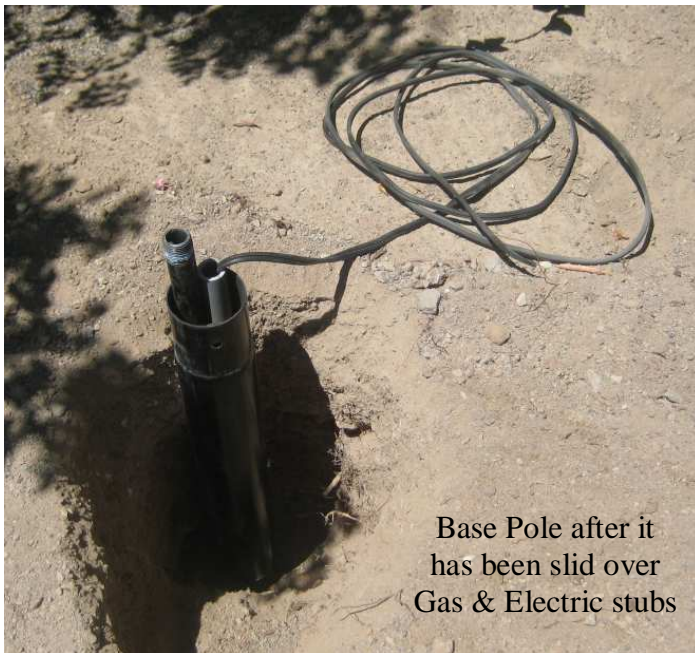
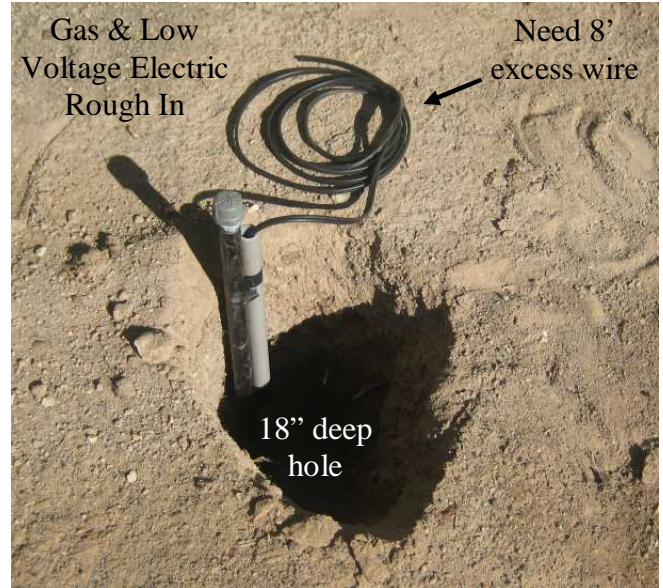
Gas & Electric
Inside Base Pole

Gas & Electric
Outside Base Pole

Combination
(Gas Inside Base Pole)
(Electric Outside Base Pole)

Installation of Base Pole – Gas & Electric Inside Base Pole

At right is a photo of ½” gas stub and an electrical conduit stubbed up inside a hole made by a post hole digger. The hole is 18” deep. The wire installed inside the conduit was low voltage landscape wire (12 gauge) and we pulled 8’ of wire beyond the end of the conduit to have plenty to pull up through the poles in the Tiki.



At left we fished the wire thru the Base Pole and slid it over the Gas & Electric stubs. Notice we adjusted the height of the Base Pole so that the tapered top end of the Base Pole ended up above grade. This we did to make the connection between the Base Pole and the Middle Pole easier later on.

Gas Hose Connection - No Manual Shutoff

Next we installed a ½” coupling on the end of the gas stub as shown at right.

The black gas hose that came with your Tiki Torch has a ¼” male thread on one end and a 3/8” flare connector on the other end. The ¼” male thread connects to the gas stub at the base of the pole. Prior to making that connection we added a brass ½” to ¼” reducer bushing in order to make the connection. This can be seen at right.



½” Coupling with brass ½” to ¼” reducer bushing and gas hose installed



Next, we routed the gas hose and wire through the Middle Pole as shown in the photo at left.

We completed the install of the Middle Pole by installing the 5/16" button head bolt and the rubber grommet that came in our hardware kit as shown in photo at right.



Gas ball valve with 1/2" to 1/4" reducer bushing and gas hose installed

Gas Hose Connection - With Manual Shutoff

Next we installed a 1/2" gas ball valve (handle removed) on the end of the gas stub.

The black gas hose that came with your Tiki Torch has a 1/4" male thread on one end and a 3/8" flare connector on the other end. The 1/4" male thread connects to the top of the gas ball valve. Prior to making that connection we added a brass 1/2" to 1/4" reducer bushing in order to make the connection. This can be seen in the photo at left.

Next we routed the gas line and wire thru the Middle Pole and slid the Middle Pole over the Base Pole. Then we aligned the large hole in the Middle hole so that it was lined up with the gas ball valve as shown at right. The large hole that comes standard in the Middle Pole is about 1/16" too small to accommodate a gas ball valve so first we bore out the hole slightly.

Next we attached the two poles with a 5/16" button head bolt that came in the installation hardware packet.



We completed the install of the gas ball valve by reattaching the handle we previously took off as shown in photo at left.

Installation of Base Pole – Gas & Electric Outside Base Pole

At right you see the gas and electric stubs and the Base Pole. The Base Pole is in the same hole but slightly offset from the stubs. For our setup we offset the Base Pole approximately 6" from the stubs.

Later in the install instructions you will see why you want to have no less than this amount of space between the Base Pole and the gas stub.



Prior to the next step you will need to create the fixture shown at left.

Seen in this photo is a 6" pipe nipple (1/2") with a cap on one end at a Tee on the other. You will need to use pipe dope and tighten these fittings to ensure no gas leaks later on.

Next install a 1/2" to 1/4" reducer bushing in the Tee and attach the gas hose.

Next, slide the fixture you created in the previous step thru the Middle Pole as shown at right. Notice the Tee with pipe nipple is at the bottom of the Middle Pole.





In the photo at left you see the plumbing fixture you created previously has been slid up inside the Middle Pole and one half of a union has been attached to it.

We previously attached a 1 1/2" pipe nipple to the union half. Then we aligned the open end of the Tee with the large hole in the Middle Pole. After applying pipe dope to the nipple connected to the union we inserted it into the large hole and threaded into the Tee inside. Using the 6" nipple as a handle, we then tightened the union with nipple into the Tee.

In the photo at right you see how we then fished our wire through an additional hole we created next to the large hole in the Middle Pole.

We fished this wire thru the top of the Middle Pole in preparation for installing the Middle Pole.



We then completed the install of the Middle Pole by first sliding it over the Base Pole and securing the two poles together with the 5/16" button head bolt from the installation hardware packet.

Then we completed the plumbing as shown in the photo at left.

Completing the Install of the Tiki Torch Poles

Once you have completed the previous steps, regardless whether your gas and electric is either Inside or Outside the Base Pole, at this point your Tiki Torch will look something like the photo at right.

Here we see the Middle Pole with both the Gas Hose and Electric wiring coming out of the top of the Pole.



In preparation for installing the Top Pole, route the gas hose and electric thru the Top Pole as shown in the photo at left.

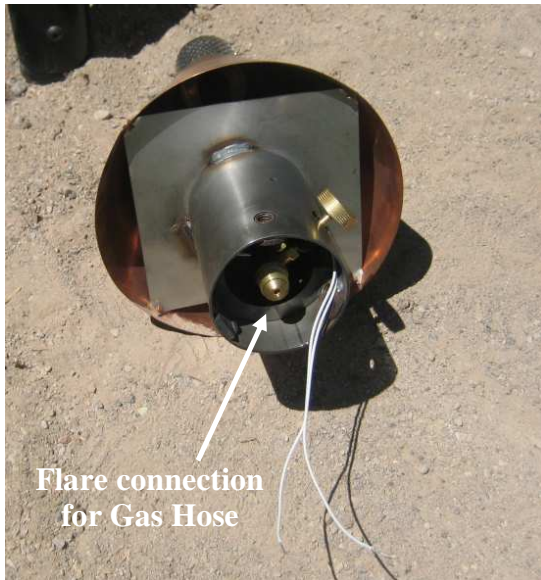
In this photo we leaned the Top Pole against the Middle Pole and routed the gas and electric thru the Top Pole.

Next slide the Top Pole over the Middle Pole and secure using one of the 5/16" button head bolts from your installation hardware packet.

When complete it will look like the photo at right. The gas hose will be protruding out of the top of the Top Pole and the electrical wire should be as well.



Installing the Tiki Torch Head



In the photo at left you are looking at a close up of the bottom of the Tiki Torch Head. Notice the two wires and the brass flare connection inside the round metal base of the Tiki Torch Head.

The gas hose previously installed will attach to the flare connection shown in this photo.

Attach the Gas Hose to the Flare Fitting in the bottom of the Tiki Head and tighten using a wrench. Since this is a flare connection, **DO NOT USE PIPE DOPE.**

Attach the two wires from the Tiki Head to the two wires previously installed inside the Tiki Poles and connect using wire nuts. It is recommended you use silicone in the wire nuts to protect against moisture.



Slide the Tiki Head over the Top Pole while ensuring the wires remain inside the Pole/Tiki Head.

Secure the Tiki Head to the Top Pole using the two (silver colored) recessed set screws from the installation hardware packet that came with your Torch.

Notice the brass colored round knob at the base of the Tiki Head. This knob serves as a manual gas shutoff and can be used to adjust the height of the Tiki flame as well.

Congratulations – Installation Complete!



Installation of Automated Tiki Torch with Bamboo Sleeve vs. Metal Poles

When using the Bamboo sleeve vs. the Metal Poles, the gas line will be the support for the Tiki Torch as opposed to the Metal Poles being the support for your Torch.

At right, you see a 1/2" gas stub and an electrical conduit with the low voltage electrical wire protruding from it.



In the photo at left, first we extended our gas line vertically by adding a 1/2" coupling, a 5' long nipple and then added another 1/2" coupling at the top.

Next we installed the fitting shown in the photo below. This fitting is a transition piece that enables the Tiki Head to be connected to 1/2" pipe and should have been included in your installation hardware packet if you ordered the bamboo sleeves with your Tiki Torches.

Then we installed the Tiki Head as shown in the photo at left and measured from the top of the brass knob on the Tiki Head to the ground. This is the length you will need to cut the bamboo sleeve to fit the Torch.





Using electrical tape, we taped our wire to the gas line and then slid the bamboo pole over the gas line with wire attached. For our mock install we did not have a bamboo sleeve so we used a 2" pvc pipe as shown in the photo at left.

In the close up photo below, you will see our wires are protruding out of the top of the bamboo sleeve but you cannot see any of the plumbing. The plumbing is actually recessed inside the bamboo sleeve slightly so that when the Tiki Torch Head is installed, the base of the Torch overlaps the sleeve slightly for a more complete 'look'.



To complete the install first thread the flare transition fitting onto the flare connection inside the base of the Tiki Torch Head. Tighten using a wrench – DO NOT USE PIPE DOPE.

Then complete the electrical by connecting the wires from the Tiki Torch Head to the wires running up thru the bamboo sleeve using wire nuts.

Next, thread the Tiki Torch Head into the 1/2" coupling that is recessed inside the bamboo sleeve. For this connection you will want to use Pipe Dope and tighten to avoid gas leaks later.

Once you have finished this step, your Tiki Torch Head should look like the finished photo below and your completed Torch should look like the photo at right.

